

ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK

ABSTRACT OF THE DISCLOSURE

Access to content addressable data on a network is facilitated using digital
5 information storing devices or data repositories ("silos") that monitor broadcast data
requests over the network. A number of silos automatically monitor both data
requests and data itself that are broadcast over a network. The silos selectively store
data. Each silo responds to data requests broadcast over the network with data the silo
has previously intercepted. A content addressable file scheme is used to enable the
10 data repositories to reliably identify data being requested. When a data request is
received, each silo evaluates whether it has all or a portion of the data being requested
and responds to requests when it has the data. Requests for data are implemented by
broadcasting a cryptographic hash data identifier of the data file needed. The data
identifier is used by a silo to determine which data to receive and store. A silo
15 includes a network interface, a digital asset collector, an asset request list, asset
storage, an asset identifier processor and an asset supplier. The asset identifier
processor computes a cryptographic hash asset identifier for a received asset and
compares it to an asset identifier on its asset request list to verify it has the correct
asset. A hash of a list of assets is also computed and broadcast over the network.
20 When the hash of the list of assets is received by a silo, it places all the assets in its
asset request list.